

Claims

What is claimed is:

1. A television enhancement programming language comprising:
 - an XML head element;
 - an object element that provides selection of an object;
 - a property element that specifies an attribute for said object;
 - 5 a modify-property element that modifies said attribute for said object;
 - a trigger element that specifies a time to render said object in relation to a video program; and
 - a television element that specifies a size and position at which said video program may be displayed.
2. The television enhancement programming language of claim 1 wherein said attribute specifies a URL associated with said object.
3. The television enhancement programming language of claim 1 further comprising:
 - an action element that provides a name for an action and contains at least one said modify-property element.
4. The television enhancement programming language of claim 1 further comprising:
 - an action-call element that allows a first action element to call a second action element.
5. The television enhancement programming language of claim 1 further comprising:
 - a script element that enables the use of a scripting language.
6. The television enhancement programming language of claim 1 further comprising:
 - a field element operable to accept user input.
7. The television enhancement programming language of claim 1 further comprising:

- an attribute element that provides platform information for said object element.
8. The television enhancement programming language of claim 1 further comprising:
 - a timeline element that contains said trigger element and a payload element that defines data embedded in a program broadcast stream.
 9. The television enhancement programming language of claim 8 further comprising:
 - a component element contained within said payload element.
 10. The television enhancement programming language of claim 9 wherein said component element specifies a file address.
 11. The television enhancement programming language of claim 9 wherein said component element specifies an expiration attribute.
 12. The television enhancement programming language of claim 1 further comprising:
 - a page element that contains said object element and said attribute element.
 13. The television enhancement programming language of claim 12 further comprising:
 - a timed action-call element that provides a call to an action that is not timed to display of a program.
 14. A television enhancement file comprising:
 - an XML head element;
 - a television element that defines an area on a television screen where a television program may be displayed;
 - 5 an object element ;
 - a property element that describes at least one attribute of said object;
 - a modify-property element that modifies said attribute for said object;
 - a trigger element that specifies when said object may be rendered; and
 - a television element that specifies a size and position at which a program may be displayed.

15. The television enhancement file of claim 14 wherein said attribute specifies a URL associated with said object.
16. The television enhancement file of claim 14 further comprising:
 - an action element that provides a name for an action and contains at least one modify-property element.
17. The television enhancement file of claim 14 further comprising:
 - an action-call element that allows a first action element to call a second action element.
18. The television enhancement file of claim 14 further comprising:
 - a script element that enables the use of a scripting language.
19. The television enhancement file of claim 14 further comprising:
 - a field element operable to accept user input.
20. The television enhancement file of claim 14 further comprising:
 - a timeline element that contains said trigger element and a payload element that defines data embedded in a program broadcast stream.
21. The television enhancement file of claim 20 further comprising:
 - a component element contained within said payload element.
22. The television enhancement file of claim 21 wherein said component element specifies a file address.
23. The television enhancement file of claim 21 wherein said component element specifies an expiration attribute.
24. The television enhancement file of claim 14 further comprising:
 - a page element that contains said object element and said attribute element.
25. The television enhancement file of claim 24 further comprising:
 - a timed action-call element that provides a call to an action that is not timed to display of a program.
26. The television enhancement file of claim 14 wherein said property element specifies a z order value for at least one of said objects.

27. The television enhancement file of claim 14 further comprising:

an attribute element that provides platform information for said object element.

28. A system for developing television enhancements comprising:

a computer;

a database; and

an XML compliant television enhancement programming language operable to specify an

5 object element that provides selection of an object, a property element that specifies an attribute for said object, a modify-property element operable to change the attribute for said object, a trigger element that specifies a time to render said object in relation to a program, and a television element that specifies a size and position at which a program may be displayed.